

REMARKS

I. STATUS OF THE APPLICATION

Claims 48-50 are pending in the Office Action dated March 23, 2005. The Examiner rejected claims 48-50 under 35 U.S.C. 103(a) as being obvious by U.S. Patent No. 5,209,801 to Smith in view of U.S. Patent No. 4,720,415 to Vander Wielen et al. Applicants respectfully traverse these rejections. Reconsideration of the application is respectfully requested in light of the following remarks.

II. REJECTIONS UNDER 35 U.S.C. § 103(a) FROM THE NON-FINAL OFFICE ACTION OF MARCH 23, 2005

The Board of Patent Appeals and Interferences ("BPAI") mailed a written decision in response to Applicants' Appeal on December 30, 2004. In the decision, the BPAI remanded the case to the Examiner for further consideration of the patentability of claims 48-50 over Smith in view of Vander Weilen under section 103(a). In response, the Examiner prepared the pending office action asserting that claims 48-50 are obvious. Specifically, the Examiner alleged that Smith disclosed each and every element of the recited invention but conceded that Smith failed to disclose that the stretchable material has a maximum elongation of at least about 85% of the elongation of the elastic members. The Examiner offers the Vander Wielen reference as teaching the "maximum elongation of at least about 85% of the elongation of the elastic members" claim element.

The present invention pertains to a stretchable composite material comprising a first layer of breathable material; a second layer of breathable material; at least two elastic members, the elastic members positioned in between the first and second layers; regions of securement securing the elastic members, the first layer and the second layer; the

regions of securement further comprising attached zones; the attached zones extending traverse and across a majority of elastic members; wherein the stretchable composite material has a maximum elongation of at least about 85% of the elongation of the elastic members. The Examiner rejected claims 48-50 as being obvious under 35 U.S.C. § 103(a) over Smith in view of Vander Wielen et al. Specifically, in the Non-Final Office Action, the Examiner asserts that:

Smith and Vander Wielen are analogous because they both disclose stretchable composites for use in incontinence articles.

The exact maximum elongation of the composite is deemed to be a cause effective variable with regard elongation of the elastic member when bonded to the non-elastic webs. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as maximum elongation of the composite, as similarly taught by Vander Wielen, through routine experimentation in the absence of a showing of criticality in the claimed maximum elongation. . .

It is desirable to have a high maximum elongation, such as 85% or higher, because the more the structure can elongate the longer the structure becomes in length and is capable of surrounding bigger items. This enables the elastic structure to fit a wider variety of shapes and sizes.

Office Action dated March 23, 2005, p.3, line 16 through p.4 line 4.

Applicants respectfully assert that Smith does not render the present invention obvious either alone, or in combination with Vander Wielen et al., because neither of these references teaches or suggests “regions of securement securing the elastic members, first and second layers;” “the regions of securement further comprising attached zones;” and “the attached zones extending traverse and across a majority of the elastic members, wherein the stretchable composite material has a maximum elongation of at least about 85% of the elongation of the elastic members” claim elements of Claim 48.

Smith teaches a layered structure comprising a first outer breathable layer, a central layer of elastic strands, and a second outside breathable layer held under tension during the manufacture of the composite. Smith at col. 2, lines 53-64. Smith discloses that the elastic strands can be “tensioned” while the layered structure is made, for example while an adhesive is applied, and then the tension in the strands is released to form the unitary structure. Smith at col. 5, lines 7-16; col. 5, lines 55-66. Smith further discloses an adhesive layer which is shown as a continuous thin layer of adhesive such as two sided tape adhesive. Smith at col. 3, lines 61-62. The thin film of adhesive used to form adhesive layer . . . will when [the] elastic strands are contracted, be caused to separate and create small opening in sufficient number to render the elastic structure breathable.” Smith at col. 3, line 68 through col. 4, line 4. The Examiner concedes that Smith does not teach the “maximum elongation of at least about 85% of the elongation of the elastic member” claim element of claim 48. Instead, the Examiner combines the alleged teachings of Vander Wielen to supplement the absent claim elements to sustain an obviousness rejection of claim 48.

Vander Wielen teaches a method of producing a composite elastic material formed from a gatherable web bonded to an elastic web using a tensioning system to elongate the elastic web, then bonding the elongated elastic web to the gatherable web and then relaxing the composite web to form the composite elastic material. Vander Wielen at col. 4, lines 18-31. Vander Wielen defines the term “elastic” to describe a material that has an elongation of at least about 25 percent of its relaxed length and will recover at least about 40 percent of the elongation. Vander Wielen at col. 4, lines 40-48. Specifically, Vander Wielen states in relevant part:

Because the elastic web may be bonded to a non-elastic material, by which is meant generally any suitable material which lacks the characteristics of an elastic as defined above, the non-elastic material tends to have a limiting effect on the degree of stretch and recovery of the elastic web.

Vander Wielen at col. 9, lines 26-30.

Vander Wielen, however, and unlike claim 48, does not disclose attached zones that extend traverse across a majority of elastic members wherein the stretchable composite material has a maximum elongation of at least 85% of the elongation of the individual elastic members. On the contrary, Vander Wielen teaches

. . . bonding an elastic web to a gatherable material, such as a non-elastic material . . . by immediately relaxing the composite after the bonding step. Immediate relaxation of the composite and thus the elastic web after the bonding step allows the elastic web to contract and then cool while relaxed, enabling it to gather the gatherable web so that the composite web possess elastic properties without rupturing the gather webs because the gatherable webs are able to extend and retract with the elastic web as a result of the presence of the gathers.

Vander Wielen, col. 10, line 51- 68.

As evidence by the above referenced text, Vander Wielen does not disclose, teach or suggest all of the claim elements of claim 48. Claim 48 discloses "regions of securement securing the elastic members the first layer and the second layer; the regions of securement further comprising attached zones; the attached zones extending traverse and across a majority of the elastic members; wherein the stretchable composite material has a maximum elongation of at least about 85% of the elongation of the elastic members." Unlike claim 48, the composite elastic material of the Vander Wielen reference is made from an elastic web held under at least about 25% elongation while the composite is being made. This elastic web is then bonded to a gatherable web where the heat and pressure from the bonding process to be softened. Vander Wielen at

col. 10, lines 1-7. Consequently, the correlation of the elongation of the individual elastic strands to the composite material is not contemplated in the Vander Wielen reference. Since this element is missing from Vander Wielen, the combination of Smith and Vander Wielen does not disclose all of the elements of claim 48.

The Examiner's argument further fails to identify any specific language in the cited references to support the assertion that Appellants' invention is obvious. Specifically, the Examiner concedes that the "at least about 85% of the elongation" is not specifically cited or even suggested in Vander Wielen but rather uses hindsight analysis that "it is desirable to have a high maximum elongation, such as 85% or higher, because the more the structure can elongate the longer the structure becomes in length and is capable of surrounding bigger items." Office Action at p. 3, lines 2-5. The Vander Wielen reference, however, describes the correlation of elongation between an elastic web bonded to a non-elastic web to the composite material and not the individual elastic strands as described in the present invention. Furthermore, the Vander Wielen reference does not discuss the elongation relationship between the individual elastic strands that comprise the elastic web and the entire composite material. Claim 48, however, disclosed "regions of securement further comprising attached zones; the attached zones extending traverse and across a majority of elastic members wherein the stretchable composite material has a maximum elongation of at least about 85% of the elongation of the elastic members." Therefore, the absence of this discussion supports Applicant's position that the pending claims are not obvious.

In the absence of the Examiner's identification of any portion of Smith or Vander Wielen to support an assertion of obviousness, a finding of unpatentability must be

withdrawn. Accordingly, Appellants respectfully submit that the pending claim 48 is distinguishable from the cited references and contains allowable subject matter.

Reconsideration is therefore respectfully requested.

Claim 49, which depends from claim 48, is allowable for at least the same reasons as claim 48. 35 U.S.C. § 112, ¶ 4 (2002); 37 C.F.R. § 1.75; MPEP 608.01 (i).

In addition, Smith fails to disclose the "stiffened edge" claimed in claim 49. Specifically, the Examiner asserts that Smith discloses a composite material further comprising a stiffened edge, since the reference discloses that the edges contain side straps. Office Action at p. 4, lines 6-9. Applicants can find no teaching or suggestion in Smith of a "stiffened edge." By definition, the term "stiffen" can be defined as "to make or become stiff or stiffer." Merriam-Webster Collegiate Dictionary 1151 (10th ed. 2001). Consequently, the term "stiff" implies a firmness of texture which makes a substance resist a bending force to a greater or lesser degree. The Smith reference, however, teaches away from using a stiff structure and describes the strap as having a "softness . . . achieved by interaction of components in the novel construction of the elastic structure of this invention." Smith at col.4, line 34-37. Thus, for this additional reason, there is no motivation to combine Smith with Vander Wielen to sustain the obviousness rejection of claim 49.

Additionally, Smith does not teach, as the Examiner suggests, side straps used to make the edges of the composite material stiffer than the middle section since they have an extra layer added to the edges only. Office Action at p. 4, lines 6-9. On the contrary, the Smith reference teaches a multi-layered structure having a first outer breathable layer, a central layer and a second outside breathable layer . . . wherein the strap like structures

are available to provide elasticity in one direction and inelasticity transverse to the direction of elasticity. Smith at col. 2, line 54-58; col. 5, lines 47-50. Moreover, Smith states that “presently available elastic structures of the type contemplated by this invention are somewhat stiff and often have a harsh and irritating surface texture.” Smith at col. 1, lines 48-50. In response to this problem, Smith teaches a structure that is flexible and has a multi-textured surface that is soft and comfortable when worn in direct contact with the skin of a user. Smith at col. 1, lines 62-66. Unlike claim 49, there is no teaching of a “stiffened edge.”

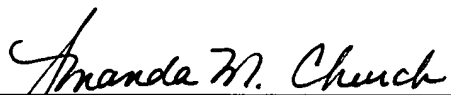
Because of the complete absence of any teaching or suggestion of the requested claim elements in each of these references, there is no suggestion to combine them. In fact, as explained above, Smith teaches away from the use of a stiffened edge. Accordingly, Smith does not reference the present invention obvious in light of Vander Wielen and Applicants respectfully submit that claim 49 is distinguishable and contains allowable subject matter.

Claim 50, which has also been rejected by the Examiner, depends from claim 48 and therefore is allowable for at least the same reasons as claim 48.

CONCLUSION

Appellants respectfully point out that none of the cited references provide the prima facie showing that would render the Appellant's claimed invention obvious under the legal doctrine set forth in *In re Rouffet*, 149 F.3d 1350, 1357-58, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998). Furthermore, the cited references do not teach or suggest the composition of Appellants' claimed invention because the cited references alone and in combination fail to teach each and every element of those claims. Applicants respectfully assert that claims 48-50 are patentable and respectfully request the Examiner grant allowance of this application. The Examiner is invited to contact the undersigned attorney for the Applicants via telephone if such communication would expedite this application.

Respectfully submitted,


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